recognized, "the nature of language makes it impossible to capture the essence of a thing in a patent application." *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 731 (2002). As a result, the "conversion of machine to words allows for unintended idea gaps." *Id.* (citation omitted). But expert testimony explaining how artisans in the relevant industry would understand a given patent helps fill in those idea gaps and thus restores to the patent a better representation of the "machine."

This pattern of ignoring the district court's careful sifting of extrinsic evidence also conflicts with the Federal Circuit's practice in validity disputes. For example, the relevant inquiry for the "anticipation" defense is what the alleged prior art patent or reference discloses to one of ordinary skill in the art. *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1349 (Fed. Cir. 2001). The outcome of that inquiry is reviewed with deference to the fact-finder. *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1323 (Fed. Cir. 2002). It is curious, therefore, that the Federal Circuit says in one instance (validity) that what a patent discloses is a question of fact, reviewed with deference, and in the other instance (claim construction), that what a patent discloses is a question of law reviewed *de novo*.

In summary, "facts are often central to the ultimate disposition of patent cases," including to claim construction. Rai, *supra*, at 878. But *de novo* review biases the Federal Circuit away from the underlying facts that help inform the understanding in the art. Accordingly, this *de novo* standard needs reform.

II. *DE NOVO* REVIEW INCREASES UNCERTAINTY AND THE COST OF LITIGATION

In *Markman*, this Court sought in part to shrink the "zone of uncertainty" in the patent system. 517 U.S. at 390 (citing *General Elec. Co. v. Wabash Appliance Corp.*, 304 U.S. 364, 369 (1938)). When disputes arise over the metes and bounds of patent claims, litigants look to trial judges to construe the disputed claims and reduce uncertainty.

Yet since *Markman*, and particularly since the Federal Circuit solidified its *de novo* standard of review in *Cybor Corp. v. FAS Techs. Inc.*, 138 F.3d 1448 (Fed.Cir. 1998) (en banc), uncertainty as increased. In particular, the reversal rate has actually increased since the *Cybor* ruling, contrary to Markman's intent. Kimberly A. Moore, *Markman Eight Years Later: Is Claim Construction More Predictable?*, 9 Lewis & Clark L. Rev. 231, 246–47 (2005).

De novo review of claim construction makes district court rulings little more than costly (and often temporary) "first takes" at claim construction. Various studies have shown that the Federal Circuit's reversal rate for claim construction rulings is at least 30% to 40%, depending on the statistical method used. *See, e.g., See* Cheryl L. Johnson, *The False Premise and Promise of Markman's Decision to Task Judges with Claim Construction and the Judicial Scorecard*, 837 PLI/Pat 9, 64–66 (2005) (summarizing various empirical studies showing the reversal rate hovers near 40%); Christian A. Chu, *Empirical Analysis of the Federal Circuit's Claim Construction Trends*, 16 Berkeley Tech. L.J. 1075, 1104 (2001) (claim construction modified in 44% of cases in the study); Moore, *Eight Years Later*, *supra*, at 233 (finding that the Federal Circuit reversed 34.5% of the claims construction cases between 1996 and 2003).

These reversal rates are the highest by far in the federal court system. In comparison, only about 8% of all civil appeals are reversed. *See* Admin. Office of the U.S. Courts, *U.S. Courts of Appeals—Appeals Terminated on the Merits, By Circuit, During the 12-Month Period Ending December 31, 2004* 1 (2005). Some might interpret this contrast to suggest that trial judges do not understand patents — that they are not listening to the Federal Circuit, following its canons of claim construction, or seeing enough patent cases to gain experience in claim construction.

The BPLA, however, observes that trial judges do understand patents, work hard at doing so, and, importantly, understand when to defer to the expertise of those of ordinary skill in translating patented technology. Indeed, statistics show that a significant number of all patent cases arise in just ten district courts. Arti K. Rai, *Specialized Trial Courts: Concentrating Expertise on Fact*, 17 Berkeley Tech. L.J. 877, 880 (2002) (*citing* Kimberly A. Moore, *Forum Shopping in Patent Cases: Does Geographic Choice Affect Innovation*?, 79 N.C. L. Rev. 889 (2000)). This statistic suggests that the judges in these courts see enough cases to gain experience and thus facility with patents.

De novo review of claim construction does nothing to promote certainty among property owners or to diminish disputes. Early settlements become less likely when litigants know that an adverse claim construction in the trial court can be argued anew to the Federal Circuit. As such, *de novo* review creates little incentive to settle before trial. Kimberly A. Moore, *Are District Court Judges Equipped to Resolve Patent Cases?*, 15 Harv. J.L. & Tech. 1, 27-28 (2001); Johnson, *supra*, at 18. Not surprisingly, patent disputes go to trial at nearly twice the rate of general civil litigation. James Bessen & Michael J. Meurer, *Lessons For Patent Policy From Empirical Research On Patent Litigation*, 9 Lewis & Clark L. Rev. 1, 3 (2005) (citation omitted).

Correspondingly, litigation costs have skyrocketed because the prospect of *de novo* review and reversal prolongs litigation and compounds expenses. The Federal Circuit's high reversal rate is a strong incentive to litigate patent claims to judgment and appeal after receiving an early adverse claim construction ruling. Moore, *District Court Judges*, *supra*, at 27–28. Studies estimate that the median cost of patent litigation is about $2 to 4 million, depending on the amount of damages at risk. Bessen & Meurer, *supra*, at 2 (*citing* Am. Intellectual Prop. Law Assoc., *Report of the Economic Survey 2003* (2003)).

In sum, *de novo* review of claim construction rulings discourages settlement, prolongs litigation, and compounds expenses. The ability of the patent system to promote certainty among property owners and diminish disputes has been weakened by the lack of deference to the trial courts.

III. A PROPOSED STANDARD OF REVIEW AND ITS APPLICATION TO THIS CASE

The BPLA proposes a standard of review that defers to the "evidentiary underpinnings" of claim construction. In particular, this Court has analogized claim construction to judicial exegesis of other written instruments, such as contracts. *Markman*, 517 U.S. at 381–2. The Federal Circuit holds that when trial courts receive evidence to resolve interpretation of contract terms, the Federal Circuit reviews the resulting findings of fact for clear error and reviews *de novo* the ultimate contract interpretation based on those facts. *C. Sanchez & Son, Inc. v. United States*, 6 F.3d 1539, 1544 (Fed. Cir. 1993).

Likewise, by analogy to contract cases, the Federal Circuit should review any factual findings underlying a trial judge's claim construction for clear error — particularly as to how one of ordinary skill would read the patent.

In this case, the trial judge found that, on cross-examination, Teva's own expert, Dr. Russell, admitted that one of ordinary skill would have read the patent as Merck proposes. The trial judge found that Dr. Russell "testified that Merck's proffered construction is the definition as it is described in the patent." *See* Merck's Appendix at 64a. This fact played an important role in the trial judge's construction of the disputed claims.

The Federal Circuit's opinion, however, nowhere mentions this testimony. Had the Federal Circuit deferred to this finding, it would have at least considered the point of view of one skilled in the art. The Federal Circuit thus would have avoided the battle of semantics over the word "about" and would have gotten closer to the machine, so to speak—closer to the methods and compositions claimed in Merck's patent.

CONCLUSION

The Boston Patent Law Association urges this Court to grant a writ of *certiorari* and to modify the Federal Circuit's *de novo* standard of review of claim construction rulings.

Respectfully submitted,

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